

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. **(Currently Amended)** A method of sharing resources between a plurality of devices, each one of the devices being provided in at least a first association of devices or a second association of devices, and each device within the first and second associations having an internal identifier for identifying the device within its association for the purpose of delivering communications to that device, wherein the first association of devices has a first gateway device with a first external identifier and the second association of devices has a second gateway device with a second external identifier, the method comprising:

the first gateway device storing a first record of:

a plurality of resources provided by devices within the first association of devices that are available for use by devices external to the first association, and where each resource is associated in the first record with a corresponding internal identifier; and

a plurality of resources provided by devices within the second association of devices that are available for use by devices external to the second association; the second gateway device storing a second record of:

a plurality of resources provided by devices within the second association of devices that are available for use by devices external to the second association, and where each resource is associated in the second record with a corresponding internal identifier; and

a plurality of resources provided by devices within the first association of devices that are available for use by devices external to the first association; a first device within the first association of devices sending a first communication to the first gateway device, the first communication relating to provision of a particular resource available from a second device in the second association of devices;

the first gateway device using the first record to determine an external identifier associated with the particular resource, when a device within the first gateway device sending association of devices sends a second communication relating to the provision of the particular resource, the second resources to a device in the second association of devices, that

communication including the determined ~~is provided with an external identifier for enabling the~~
second ~~[[that]]communication to be received by the second association of devices.~~

2. **(Currently Amended)** The method of claim 1, ~~further comprising wherein~~
~~the first gateway device transmitting the communication to~~ communications between the
~~first association of devices and the second gateway device across~~ association of devices is
~~transmitted via a communication network via a processing node.~~

3. **(Canceled)**

4. **(Currently Amended)** The method of claim 1, ~~[[3,]]~~ wherein the second
~~communication transmitted by the first gateway device includes associated with the external~~
~~identifier comprises the internal identifier of the first device within the first association of~~
~~[[the]]devices from which the first~~ [[that]]communication originated.

5. **(Currently Amended)** The method of claim 1, ~~[[3,]]~~ wherein the second
~~communication transmitted by the first gateway device includes associated with the external~~
~~identifier comprises the internal identifier of the second relevant device in the second association~~
~~of devices.~~

6. **(Currently Amended)** The method of claim 2, wherein the determined
~~external identifier comprises a first portion which uniquely identifies the first association of~~
~~devices to the communication network and a second portion which uniquely identifies the second~~
~~association of second devices to the communication network.~~

7. **(Currently Amended)** The method of claim 6, wherein the first portion of
the determined external identifier enables the second communication to be transmitted via the
communication network to the [[a]]processing node, which processing node enables the second
communication external identifier to subsequently be forwarded to the second association of
devices in dependence upon the second portion of the determined external identifier.

8. **(Currently Amended)** The method of claim 6,~~[[2,]]~~ wherein the communication network comprises the Internet and the determined external identifier enables the determination of a unique IP address of at least one of the second association of devices and~~[[or]]~~ the first association of devices.

9-11. **(Canceled)**

12. **(Currently Amended)** The method of claim 1,~~[[11,]]~~ further comprising~~wherein~~

the second gateway device receiving ~~receives~~ said second communication relating to the provision of the particular resource ~~resources by a device in the second association of devices~~ and providing the second ~~that provides communication to the particular with the external identifier for enabling that communication to be received by the relevant device in the second~~ association of devices.

13. **(Currently Amended)** The method of claim 11, further comprising~~wherein~~

the first gateway device receiving ~~receives~~ a reply communication from the second gateway device ~~association of devices~~ relating to the provision of the particular resource ~~resources by the second [[a]]device in the second association of devices and onwardly transmitting~~ ~~transmits~~ that reply communication to the first device ~~one of those devices from which the first communication relating to the provision of the particular resource resources~~ originated.

14. **(Currently Amended)** The method of claim 1,~~[[11,]]~~ further comprising wherein

each of the devices within the first association of devices willing to provide a resource ~~transmitting the resources transmits in a message to the gateway device indicating the corresponding resource resources available;~~

the first gateway device receiving and storing the messages, ~~which message is received and stored by the gateway device.~~

15. **(Currently Amended)** The method of claim 14, wherein the ~~messages of~~ each message stored on the first gateway device enables the selection of a device within the first association of devices ~~the or each device willing to provide a requested resource the resources~~ and the routing of a request for use of the requested resource ~~those resources to the corresponding [[that]]device.~~

16-18. **(Canceled)**

19. **(Currently Amended)** A system for allowing the sharing of resources between a plurality of devices, each one of the devices being provided in a first association of devices or a second association of devices and each device within the first and second associations having an internal identifier for identifying the device within its association for the purpose of delivering communications to that device, the system comprising including
a first gateway device with a first external identifier, the first gateway device configured to store a first record of:

a plurality of resources provided by devices within the first association of devices that are available for use by devices external to the first association, and where each resource is associated in the first record with a corresponding internal identifier; and

a plurality of resources provided by devices within the second association of devices that are available for use by devices external to the second association;
a second gateway device with a second external identifier, the second gateway device configured to store a second record of:

a plurality of resources provided by devices within the second association of devices that are available for use by devices external to the second association, and where each resource is associated in the second record with a corresponding internal identifier; and

a plurality of resources provided by devices within the first association of devices that are available for use by devices external to the first association;

the first gateway device further configured to use the first record to determine an external identifier relating to a particular resource available from a second device in the second association of devices, in order to provide means for providing a communication from a first device within the first association of devices, relating to the provision of the particular resource, resourcees; to the second gateway. [[a]]device in the second association of devices, the communication including the determined with an external identifier for enabling that communication to be received by the second association of devices.

20. **(Currently Amended)** The system of claim 19, wherein the first gateway device is further configured to transmit the communication to communications between the first association of devices and the second gateway device association of devices across is transmitted via a communication network via a processing node.

21. **(Canceled)**

22. **(Currently Amended)** The system of claim 19,[[21,]] wherein the communication transmitted by the first gateway device includes associated with the external identifier comprises the internal identifier of the device within the first association of the devices from which that communication originated.

23. **(Currently Amended)** The system of claim 19,[[21,]] wherein the communication transmitted by the first gateway device includes associated with the external identifier comprises the internal identifier of the second the relevant device in the second association of devices.

24. **(Currently Amended)** The system of claim 20, wherein the determined external identifier comprises a first portion which uniquely identifies the first association of devices to the communication network and a second portion which uniquely identifies the second association of second devices to the communication network.

25. **(Currently Amended)** The system of claim 24, wherein the first portion of the determined external identifier is configured to enable ~~enables~~ the communication to be transmitted via the communication network to a processing node, which processing node is configured to enable ~~enables~~ the communication external identifier ~~to subsequently be forwarded~~ to the second association of devices in dependence upon the second portion of the determined external identifier.

26. **(Currently Amended)** The system of claim 24,~~[[20,]]~~ wherein the communication network comprises the Internet and the determined external identifier is further configured to enable ~~enables~~ the determination of a unique IP address of at least one of the second association of devices and~~[[/or]]~~ the first association of devices.

27-29. **(Canceled)**

30. **(Currently Amended)** The system of claim 19,~~[[29,]]~~ wherein the second gateway device is further configured to receive ~~receives~~ said communication relating to the provision of the particular resource ~~resources by a device in the second association of devices~~ and to provide ~~provides~~ that communication to the second ~~with the external identifier for enabling that communication to be received by the relevant device in the second association of~~ devices.

31. **(Currently Amended)** The system of claim 19,~~[[29,]]~~ wherein the first gateway device is further configured to receive ~~receives~~ a reply communication from the second gateway device ~~association of devices~~ relating to the provision of resources by the second device ~~a device in the second association of devices~~ and to onwardly transmit ~~transmits~~ that reply communication to the first device ~~one of those devices~~ from which the communication relating to the provision of the particular resource ~~resources~~ originated.

32. **(Currently Amended)** The system of claim 19,~~[[29,]]~~ wherein each of the devices within the first association of devices willing to provide a resource ~~the resources~~ is

configured to transmit transmits-in a message to the first gateway device indicating the resource resources available, which message is received and stored by the first gateway device.

33. **(Currently Amended)** The system of claim 32, wherein the first gateway device is configured to use the stored messages to enable or each message stored on the gateway device enables the selection of a the or each device within the first association of devices willing to provide a requested resource and to enable the resources and the routing of a request for use of the requested resource to the corresponding those resources to that device.

34-36. **(Canceled)**

37. **(Currently Amended)** An association of devices between which resources are shared, ~~wherein~~ each device within the association having ~~[[has]]~~ an internal identifier for identifying the device within the ~~[[its]]~~ association for the purpose of delivering communications to the ~~[[that]]~~ device, the association of devices comprising:

a gateway device with an external identifier, the gateway device configured to communicate with one or more other associations of devices, the one or more other associations of devices also having a gateway device with an external identifier, and wherein the gateway device of the association of devices is further configured to store a record of:

a plurality of resources provided by devices within the association that are available for use by devices external to the association, and where each resource is associated in the stored record with a corresponding internal identifier; and

a plurality of resources provided by devices within the one or more other associations of devices that are available for use by devices in the association; and

a first device configured to send a first communication to the gateway device, the communication relating to provision of a particular resource available from a second device in one of the one or more other associations of devices,

wherein the gateway device is configured to use the stored record to determine an external identifier associated with the particular resource and ; and wherein a device within the association of devices is operable to send a second communication relating to the provision of the particular resource, the second resources to a device in a second association of devices;

~~which communication including the determined is provided with an external identifier for enabling the second [[that]]communication to be received by the other second-association of devices.~~

38. **(Currently Amended)** The association of claim 37, wherein the gateway device is configured to transmit the second communication to the other communications between the first association of devices and the second association of devices across is transmitted via a communication network via a processing node.

39. **(Canceled)**

40. **(Currently Amended)** The association of claim 37,[[39,]] wherein the second communication transmitted by the gateway device includes associated with the external identifier comprises the internal identifier of the first device within the first association of the devices from which the first [[that]]communication originated.

41. **(Currently Amended)** The association of claim 37,[[39,]] wherein the second communication transmitted by the gateway device includes associated with the external identifier comprises the internal identifier of the second relevant device in the other second association of devices.

42. **(Currently Amended)** The association of claim 38, wherein the determined external identifier comprises a first portion which uniquely identifies the first-association of devices to the communication network and a second portion which uniquely identifies the other association of second-devices to the communication network.

43. **(Currently Amended)** The association of claim 42, wherein the first portion of the determined external identifier enables the second communication to be transmitted via the communication network to the [[a]]processing node, which processing node enables the second communication external identifier to subsequently be forwarded to the other second

association of devices in dependence upon the second portion of the determined external identifier.

44. **(Currently Amended)** The association of claim 42,[[38,]] wherein the communication network comprises the Internet and the determined external identifier enables the determination of a unique IP address of at least one of the second—association of devices and[[/or]] the other first-association of devices.

45-48. **(Canceled)**

49. **(Currently Amended)** The association of claim 37,[[47,]] wherein the gateway device is configured to receive ~~receives~~ a reply communication from a gateway device of the other ~~the second~~—association of devices, the reply communication relating to the provision of the particular resource, ~~resources by a device in the second association of devices and to~~ onwardly transmit ~~transmits~~ that reply communication to the first device ~~one of those devices~~ from which the first communication relating to the provision of the particular resource ~~resources~~ originated.

50. **(Currently Amended)** The association of claim 37,[[47,]] wherein each of the devices within the ~~first~~—association of devices which are willing to provide a resource are configured to transmit ~~the resources transmits in~~ a message to the gateway device indicating the corresponding resource ~~resources~~—available, which message is received and stored by the gateway device.

51. **(Currently Amended)** The association of claim 50, wherein the ~~or each~~ message stored on the gateway device is configured to use the stored messages to enable ~~enables~~ the selection of a ~~the or each~~ device within the association of devices willing to provide a requested resource and to enable ~~the resources and the~~ routing of a request for use of the requested resource to the corresponding ~~those resources to that~~ device.

52. **(Canceled)**

53. **(Canceled)**

54. **(Currently Amended)** The association of claim 37,[[47,]] wherein the ~~other second-association of devices includes an other comprises a plurality of devices, wherein one of those devices comprises a gateway device corresponding to the gateway device of the first association of devices, and wherein the gateway device is of the first association of devices~~ adapted to communicate with the other gateway device of the other second-association of devices.

55-59. **(Canceled)**

60. **(New)** The method of claim 2, further including registering the first and second gateway devices with the processing node.

61. **(New)** The method of claim 2, further including the processing node assigning the first and second external identifiers to the first and second gateway devices respectively.

62. **(New)** The method of claim 1, further including the first and second gateway devices periodically transmitting a message advertising the existence of the first and second association of devices, respectively.

63. **(New)** The method of claim 1, further including:
each gateway device providing each other device in its association with security data, the security data of each device being interpretable by each other device within the association, particular modes of communication only being allowed between devices within the association having such security data; and

each gateway device selectively enabling sharing of said resources between the devices within its association when the devices are able to communicate directly.

64. **(New)** The method of claim 14, wherein the message is transmitted in response to a request message from the first gateway device.

65. **(New)** The system of claim 20, wherein the processing node is configured to register the first and second gateway devices with the processing node.

66. **(New)** The system of claim 20, wherein the processing node is further configured to assign the first and second external identifiers to the first and second gateway devices respectively.

67. **(New)** The system of claim 19, wherein the first and second gateway devices are further configured to periodically transmit a message advertising the existence of the first and second association of devices, respectively.

68. **(New)** The system of claim 19, wherein each gateway device is further configured to provide each other device in its association with security data, the security data of each device being interpretable by each other device within the association, particular modes of communication only being allowed between devices within the association having such security data; and

each gateway device further configured to selectively enable sharing of said resources between the devices within its association when the devices are able to communicate directly.

69. **(New)** The system of claim 32, wherein the devices of the first association of devices which are willing to provide a resource are configured to transmit the message in response to a request message from the first gateway device.

70. **(New)** The association of devices of claim 37, wherein the gateway device is further configured to periodically transmit a message advertising the existence of the association of devices.

71. **(New)** The association of devices of claim 37, wherein the gateway device is configured to:

provide each other device in the association with security data, the security data of each device being interpretable by each other device within the association, particular modes of communication only being allowed between devices within the association having such security data; and

selectively enable sharing of said resources between the devices within the association when the devices are able to communicate directly.

72. **(New)** The association of devices of claim 50, wherein each device willing to provide a resource is configured to transmit the message in response to a request message from the gateway device.